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STATE OF ILLINOIS

ILLINOIS COMMERCE COMMISSION

SOUTHEASTERN ILLINOIS ELECTRIC COOPERATIVE, INC.,	)	
Complainant-Counter Respondent,	)	
vs.	)	DOCKET NO. 00-0583
ILLINOIS POWER COMPANY,	)	
Respondent-Counter Complainant.	)	

PREPARED DIRECT TESTIMONY OF HEATH A. LOVELL ON BEHALF OF ARCLAR COMPANY LLC IN SUPPORT OF THE COMPLAINT FILED BY SOUTHEASTERN ILLINOIS ELECTRIC COOPERATIVE, INC. FILED IN THE ABOVE CAUSE

Q: Please state your name.

A: Heath A. Lovell.

Q: What is your current employment?

A: I am employed by Big Ridge, Inc., with offices at 29 West Raymond St., Harrisburg, Illinois 62946.

Q: In what capacity are you employed?

A: I am an electrical engineer and specifically I am the project Manager for the Willow Lake Mine Portal No. 3 being constructed in Saline, County, Illinois by Arclar Company LLC.

Q: What is your education?

A: I received a Bachelors of Science Degree in electrical engineering from the

University of Kentucky in 1997 and I received a Masters in Business Administration from the University of Kentucky in 1998. In addition I have an EMT license and other mine specific training.

Q: What is your employment history?

A: I was first employed by Coal Miners, Inc. during the summer of 1996 and worked summers and vacations for them until graduation when I commenced full time employment with them. Thereafter I was employed by Sugar Camp Coal until May 2000 when I commenced employment with Big Ridge Inc., who is building the Willow Lake Mine Portal No. 3, in Saline County, Illinois on behalf of Arclar Company, LLC.

Q: Has the construction project started?

A: Yes. The construction projected started in November 2000 and is proceeding.

Q: Are you in need of electric service at the present time at the construction site?

A: Yes. We are in need of temporary three phase electric service for construction work. That electric service is being provided by SouthEastern Illinois Electric Cooperative, Inc. (SEIEC). The temporary electric service consists of two 480 volt three-phase services.

Q: When will permanent electric service be required at the Willow Lake Mine site?

A: Permanent electric service will be needed by October 1, 2001. We plan to start testing the mine equipment at that time.

Q: What type of electrical loads are connected to the temporary electric service at the Willow Lake Mine site?

A: At present the temporary electric service is used for the following equipment:

A. Four - 350 horsepower air compressors, three phase, 480 volts, Type F motors.

B. Two - 20 horsepower pumps, three phase, 480 volts.

C. One - 50 horsepower fan, three phase, 480 volts.

D. Office trailer used by the construction company which is single phase 120/240 volts.

Q: What type of electrical service will be required for the permanent electric service to the Willow Lake Mine site?

A: The Willow Lake Mine site will require electric service from a 69 KV line.

Q: Will the electrical load for the mine exceed 1500 kilowatts during the first year of service?

A: Yes. Virtually all the mine equipment will be operated electrically and the load will exceed 1500 kilowatts during the first year of operation.

Q: What type of electrical loads will be utilized by the mine at the Willow Lake Mine site?

A: Equipment sufficient to start the initial operation of the mine will be moved to the site ready for operation by October 1, 2001. It will consist of equipment for the underground mining operation and the preparation plant as follows:

(a) Underground mining operation:

1. Six coal production units (coal digging machines), each unit being 1050 hp.

2. Thirty-two production support units, each unit being 300 hp.

3. One slope belt partially above and partially below the surface at 800 hp

4. Two ventilating fans each at 500 hp

5. Two escape hoists each at 100 hp

(b) Preparation plant with numerous electric motors totaling approximately 4000 hp

Exhibit 13 attached to my Direct Testimony sets forth the equipment horsepower ratings and electrical needs for the Willow Lake Mine Portal No. 3. Exhibit 13 was prepared by me as a part of my duties as project engineer. It is anticipated that the total electrical needs of the Willow Lake Mine site when fully operating will be 13,000 kilowatts per month and 6,000,000 KWH per month when fully operational. Because of the electrical demand, the electrical service will have to be provided by or from a 69KV line. In addition we will also need power for pump stations in the area. There will be a pump station for pumping water out of the old mine works. One raw water pumping station will also be required. These pumping stations will be separate metering locations which will be one-half to one mile west of the existing mine site and located in SEIEC territory.

Q: Are you presently served by SEIEC at any other mining operation?

A: Yes.

Q: At what mining operation does SEIEC provide electric service to a company

with which you are affiliated?

A: SEIEC provides electric service to the Big Ridge, Inc. Preparation Plant and Portal No. 2 mining operation, both located in Saline County, Illinois.

Q: From where does SEIEC provide electric service to Big Ridge, Inc. for use at those mining operations?

A: SEIEC provides electric service to Big Ridge at the SEIEC Equality Substation. Arclar Company LLC (Arclar) picks up the electric service at that electric service point of delivery, which is also the metering point and transmits such electric service to the mine portal by a 69 KV line owned by Arclar.

Q: Have you had discussions with James M. Cummins and Dustin D. Tripp of SEIEC for providing the permanent electric service to the Willow Lake Mine site?

A: Yes.

Q: Has a decision been made by Arclar as to the route and type of electric service to be provided to the Willow Lake Mine site?

A: Yes. Arclar has requested SEIEC to provide electric service by means of a 69 KV line connected to the existing electric service point of delivery and metering point for Big Ridge Mine. Electric service would then be provided from that point to the Willow Lake Mine site approximately 4.17 miles in a Northeasterly direction by a 69 KV line. The 69 KV line will be constructed by SEIEC and purchased from SEIEC by Arclar Company so that thereafter Arclar Company will own the 69 KV line.

Q: Are you familiar with the existing 69 KV line that feeds the SEIEC Equality Substation?

A: Yes. I have reviewed information provided by SEIEC on the line and I have visually inspected it. That line was constructed in approximately 1974. It is composed of wood poles with two crossarms each with three, 4/0 ACSR conductors and has provided extemely good service to Big Ridge Mine through the Equality Substation. We have not suffered any outages from the beginning of 1996 to the present except for two minor outages each of which lasted less than 15 minutes.

Q: Is the reliability of electric service to your mine portals important?

A: Yes. It is extremely important. All of our equipment is operated electrically. If an outage with a duration of 15 minutes or more occurs, State and Federal law mandates that we remove all personnel from the mine, the mining operation is stopped and cannot again be started until examined by a licensed State of Illinois mine examiner. Such a shut down and reinspection can take at a minimum two to four hours after operation of the ventilation fans has resumed. Such a work stoppage is financially harmful to Arclar. Therefore, any electric outages are extemely important to us and create both safety hazards as well as economic detriment to Arclar. However, the real danger beyond the financial detriment to Arclar is a basic safety matter that occurs when methane gas builds up without the ventilating fans operating because of an electrical outage. When there is a build up of 5% or more of methane gas, an explosion in the

underground mine can be caused by a spark. Such a spark can occur from a loose wire connection when power is eventually restored or a rock falling against a piece of equipment or against another rock. In addition, spontaneous combustion within the coal can generate enough heat and a fire which when combined with the build up of methane gas can cause an explosion. This causes a safety factor not only for the individuals involved, but also for the whole mine operation. Such an explosion can be disastrous to the mining operation.

Q: Are there other advantages to Arclar Company and its mining operation at Willow Lake Mine Portal should SEIEC provide the electric service?

A: Yes. Arclar Company will be able to aggregate the electrical load of the new Willow Lake Mine Portal with the existing Big Ridge Mine electrical loads all served from the Equality Substation and thus reduce the cost of electric power to Arclar Company for operation of the Willow Lake Mine Portal. These savings will more than offset the cost of constructing the approximately 4.17 miles of 69 KV line from the Equality Substation to the Willow Lake Mine Portal No. 3.

Q: What other factors affect your decision with regard to your preference for an electric service provider?

A: Besides the known reliability of the existing SEIEC electrical service, and the Southern Illinois Power Cooperative (SIPC) 69 KV transmission line that feeds the Equality Substation, we are aware of the ability of SEIEC to provide maintenance service to Arclar. At the present time SEIEC provides

maintenance to the 69 KV line transmitting electricity from the Equality Substation to the Big Ridge, Inc. Preparation Plant and Portal No. 2. SEIEC is available on short notice to correct any problem with the electrical lines and promptly responds to all outage calls so that Big Ridge Mine has continuous and adequate electric service for its mine operation. SEIEC maintains its maintenance staff and lineman at Eldorado within only 6.1 miles of the mine site. SEIEC's equipment is in excellent condition. Thus, Arclar has faith in the ability of SEIEC to maintain the transmission facilities timely and in an excellent manner. This is reflected in the lack of outages at the Big Ridge, Inc. Preparation Plant and Portal No. 2.

In addition Arclar Company plans to own the 69 KV transmission line providing electric service to Willow Lake Mine Portal No. 3 and in turn to contract with SEIEC to provide maintenance on that line. SEIEC has the personnel and equipment necessary to maintain such facility and Arclar Company does not. Further, because Arclar Company owns the transmission line it has control over the repair and maintenance of that line because the contractor is directly responsible to Arclar for such maintenance activities.

Q: Can you summarize for us the conditions that Arclar Company requires be met when choosing an electric service provider for the Willow Lake Mine Portal No. 3?

A: Yes. These are reliability, safety, economic/financial and service.

Q: Does SEIEC meet all of these requirements?

A: Yes. We have determined that SEIEC does meet all of these requirements based upon the historical record of electric service to Big Ridge, Inc. mining operation which service history has existed since approximately 1989.

Q: Have you determined the cost of the construction of the approximately 4.17 mile 69 KV line from Equality Substation to the Willow Lake Mine Portal?

A: Yes. It will be approximately $125,000.00 per mile.

Q: Is this acceptable to Arclar?

A: Yes.

Q: Why is this acceptable?

A: Because of the foregoing reasons that I have stated and because Arclar will be allowed to own the line and therefore control maintenance and service on the same and because it allows Arclar to be served from existing electric facilities that Arclar is familiar with and knows provide reliable electric service meeting the conditions of reliability; safety; economics and financial; and service.

Q: Did Arclar ever consider connecting to a Central Illinois Public Service Company owned 69 KV line located approximately three-fourths of a mile north of the Willow Lake Mine Portal site?

A: That was considered by Arclar.

Q: Did you determine that such would not be a feasible connection point for providing of electric service to the Willow Lake Mine Portal No. 3?

A: Yes.

Q: Upon what basis did you make that determination?

A: That CIPS 69 KV line was built in 1924 and is over 70 years old and therefore is degrading in its condition and ability to provide reliable service. Further, such a connection would mean that Arclar would have to take electric power from Illinois Power Company. Because the cost of this electric power could not be aggregated with the existing electric power purchased by Arclar from SEIEC at the Equality Substation for use at the Big Ridge, Inc. mining operation and because of the difference in electric rates between SEIEC and IP, the power costs to Arclar will be approximately one cent more per KWH for its electric power if the connection was made to the CIPS 69 KV transmission line instead of the SEIEC Equality Substation metering point.

Q: Have you made calculations as to the power cost savings to Arclar between utilizing SEIEC's electric power and IP's electric power?

A: Yes.

Q: How did you make this determination?

A: I based the study upon the published Tariff, No. 21 and Published Tariff No. 24 of IP and the SEIEC applicable rate provided to me by SEIEC.

Q: Is the study attached as SEIEC Exhibit 14?

A: Yes.

Q: What does that study show?

A: That study shows that the SEIEC electric rate will generate approximately a one cent savings for electric power to Arclar. Utilizing a one cent electric power savings based upon the six million KWH per month energy usage for the mine

operation results in an annual savings for electric power of $720,00.00 per year.

Q: Are you concerned about the reliability of electric service provided to the Willow Lake Mine Portal No. 3 by Illinois Power Company (IP)?

A: Yes.

Q: What are your concerns with respect to such electrical service?

A: The reliability is a major concern if Arclar is required to take electric service from IP. IP will connect electric service to the above mentioned CIPS 69 KV line. I consider this line in my opinion to be less reliable than the SIPC 69 KV line feeding the SEIEC Equality Substation and the new 69 KV transmission line which will be constructed from that substation to the Willow Lake Mine Portal. The SIPC/SEIEC 69 KV transmission line to the Equality Substation is less than half the age of the CIPS 69 KV line and therefore has less degradation to it by virtue of its age and consequently the structures and facilities constituting the line should be far more reliable. Thus, because reliability and continuity of electric service is so important to Arclar Company both from a mine safety factor and because of the financial burden that a less reliable line would impose upon the mining operation, there is no question that Arclar Company will be better served by SEIEC from its newer facilities at the Equality Substation.

Q: Have you been provided with outage records for the CIPS 69 KV transmission line in question covering the period from January 1, 1996 to the present time

and represented by SEIEC Exhibit 11, attached to the Direct Testimony of James M. Cummins?

A: Yes.

Q: Do you have an opinion based upon your engineering training and experience and your experience with mining operations as to what these outages reflect with respect to reliability of the CIPS 69 KV line in question?

Q: Yes. I have an opinion.

Q: What is your opinion?

A: The records reflect that there have been 31 outages since January 1996, eight of which certainly exceeded the 15 minute maximum outage time that Arclar can be subjected to. This many outages is far too many and in my opinion reflects a line that is totally unreliable for the type of electrical service required by Arclar for the Willow Lake Mine Portal site.

Q: Have you received information represented by SEIEC Exhibit 12 attached to the Direct Testimony of James M. Cummins that CIPS is considering reconductoring the 69 KV line and that IP has complained to CIPS about the number of outages, irrate customers and the unreliability of the CIPS KV line?

A: Yes. I reviewed SEIEC Exhibit 12 which is the memo of Jason Genovese, CIPS Transmission Planning Engineer for the CIPS 69 KV transmission line in question. This memorandum notes two things. First, CIPS is evaluating a proposed project to reconductor this particular 69 KV transmission line due to its reliability performance. Secondly, IP has advised CIPS that the number of

outages experienced on this 69 KV transmission line have increased significantly and that customers being fed from that line are becoming irate.

Q: Does this information support your opinion as Project Engineer for the Willow Lake Mine Portal site that the CIPS 69 KV transmission line will be unreliable in providing the necessary electric service to Arclar?

A: Yes. This information supports my opinion that it does not provide reliable electric service in accordance with the requirements within the underground mining industry and therefore is not a practical line for Arclar to consider to provide electric service to the Willow Lake Mine Portal site. Further, the safety factor for both the investment of Arclar and its employees is paramount. That safety factor is increased tremendously by the use of reliable electric power from SEIEC.

Q: Have you had difficulties in obtaining consistent and prompt service from IP?

A: Yes. At the request of Power Inc., I have had dealings with IP through the coal dock owned and operated by Power, Inc. and which coal dock is utilized by Arclar at Shawneetown, Illinois. That is where a majority of the coal mined by Arclar is shipped. Recently Power, Inc. needed to upgrade the electric motors so the facility could load more of Arclar's coal. In order to do so IP needed to upgrade the transformers at the facility in order for these electric motors to be upgraded. IP advised me that it would take 12 to 16 weeks before they could upgrade the transformers and they were not certain that it could be performed by that time. On behalf of Power, Inc., I offered to pay for the transformers

and to pay for all the work and in addition to arrange for a contractor to perform the work. IP refused to allow Power, Inc. to perform the work in that manner. As a result Arclar's ability to ship coal through the Shawneetown port would be limited until the work was completed. At the same time the market demand and price for coal is high. Thus, Arclar is prevented from realizing additional revenue simply because IP will not cooperate with us in upgrading our electrical equipment at this port. Three months from now this ability to capitalize on the economic situation for coal may no longer be present. In comparison, SEIEC installed a new temporary service for Arclar consisting of nine poles and a 1500 KVA bank of transformers in under 4 weeks. The only thing I was asking IP to do at the coal dock is upgrade three existing transformers totaling 1000 KVA which Arclar had agreed to pay for. This was an extremely frustrating situation for Power, Inc. as well as Arclar and myself.

Q: Has this work been performed by IP?

A: Yes, the work was accomplished by IP May 31, 2001. I initially contacted IP with regard to this matter on or about April 2, 2001. Thus, it took from April 2, 2001 to May 31, 2001, or almost nine weeks, to accomplish this work. In addition, I did not receive any positive assistance from IP until after IP took my deposition on April 13, 2001 in this case during which deposition I, in response to questions by the IP attorney, disclosed my frustrations with IP's service to Power, Inc. and Arclar. Following my deposition and during the afternoon of that same day, I received a call from Greg Keucker, my contact person at IP for

obtaining this service work, and he advised that IP would complete the work in approximately eight to twelve weeks, when prior to that time, the service time period was less definite.

In addition, an IP meter serving the Power, Inc. coal dock at Shawneetown malfunctioned. On or about April 16, 2001, the IP service representative contacted Power, Inc. dock personnel asking to shut down the dock so that IP could perform service work on the defective meter. Power, Inc. loads 1,000 tons of coal per hour through this facility. With the current price of coal at $25.00 per ton, Arclar would loose $25,000.00 of revenue per hour for each hour that the coal dock is completely shutdown to replace the meter. We asked IP to replace the meter after hours or on Saturday and Sunday when the coal dock would not be operating, but IP refused to do so. In addition, IP refused to work on the meter when it was hot. The problem was not repaired by IP until May 31, 2001. SEIEC has never refused service to us under any similar circumstances and has always been cooperative with us.

Q: Are you concerned about the service attitude displayed by IP in these situations with regard to electric service to the Willow Lake Mine Portal No. 3?

A: Yes.

Q: Why?

A: Because the Willow Lake Mine Portal will have approximately 200 people working underground during any one shift with three shifts per day generally working. If there is an electrical problem at 11:00 p.m., at 3:00 a.m. or at

anytime during the work hours, Arclar cannot have IP refusing to repair the problem because it will have to pay its employees overtime. Anytime our electrical service is interrupted, there is no ventilation in the underground mine, methane gas builds up and should the fans which are electrically operated be off for more than 15 minutes everyone must come out of the mine and no one else can go back in until the entire mine has been examined by a licensed State of Illinois mine examiner and the ventilation fans again operating for two to four hours. Thus, if service was interrupted for more than 15 minutes we would have to wait anywhere from two to four hours after the ventilation fans start operating again before the mine could be placed back in operation. With the mine producing 700 tons of coal per hour at $25.00 per ton or $17,500.00 per hour, such an interruption and refusal to promptly repair the same would be costly to Arclar. For these reasons we are not interested in electrical service from IP or from the CIPS 69 KV transmission line.

HEATH A. LOVELL

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PROOF OF SERVICE

I, JERRY TICE, hereby certify that on the 19th day of June, 2001, I deposited in the United States mail at the post office at Petersburg, Illinois, postage fully paid, a copy of the document attached hereto and incorporated herein, addressed to the following persons at the addresses set opposite their names:

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